

Insect Fauna of Is. Boleum-do (Prov. Gyeonggi-do), Korea

Seong-Joon Park^{1*}, Young-Ho Cho², Young-Jin Kim², Yong-Gu Han², Heon-Myoung Lim¹,
Seo-Kyoung Park³, and Eu-Jeong Hong³

¹National Institute of Environmental Research, Kyongseo-dong, Seo-gu, Incheon 404-708, Korea

²Department of Life Science, Daejeon University, 96-3 Yongun-dong, Dong-gu, Daejeon 300-716, Korea

³Division of Biological Science, Wonkwang University, 344-2, Shinyong-dong, Iksan, Jeonbuk 570-749, Korea

Abstract: We investigated insect fauna of Is. Boleum-do from April to October, 2009. As a result of all the collections examined, 162 species of 59 family under 11 order were identified. Therefore, the species composition of insect diversity from Is. Boleum-do was a total of 228 species of 77 families under 11 orders including 3 endangered species (level, *Fabriciana nerippe*, *Lethocerus deyrollei* and *Copris tripartitus*), 22 endermic species, 3 management of exotic species, 1 species of IUCN Red List and 42 designated species; 103 species of 18 families Lepidoptera (35.76%) which was the highest, 51 species of 18 families Coleoptera (17.72%), 44 species of 15 families Hemiptera (15.28%) and 37 species of 6 families Hymenoptera (12.85%).

Key words: Insect Fauna, Is. Boleum-do, Korea

Introduction

The Is. Boleum-do is located mid-west of West sea from 125°40'22" to 125°42'49" east longitude and from 37°38'45" to 37°40'44" north latitude. Its total area is 6.36 km² and its coastal line stretches 16.2 km. This Island is distant 7 km west-northward from Is. Ganghwa-do and 5.5 km south-westward from Hwanghae-do in North Korea.

The previous reports of insect fauna from Is. Boleum-do were 27 species by Nam *et al.* (2007) and 142 species by Kim & Hong (2007). We intent to understand the insect fauna of the island by this survey and provide the data and information of for the management and preservation policies.



Fig. 1. The survey sites from Is. Boleum-do.

*To whom correspondence should be addressed.

Tel: +82-32-560-7458

E-mail: antstudy1@korea.kr

Table 1. The total number of insect and relative dominance in Is. Boleum-do ('09 year)

Order	Family	Species	R·D* (%)	Endangerd Species		Endemic Species	Management of Exotic Species	IUCN Red List	Designated Species**
				Level	Level				
Odonata	1	4	2.47						
Mantodea	1	2	1.23						
Dermaptera	1	1	0.62			1			
Orthoptera	6	11	6.79			11			2
Hemiptera	7	8	4.94		1				1
Homoptera	4	7	4.32						
Neuroptera	2	2	1.23						1
Coleoptera	14	30	18.52		1				9
Diptera	3	8	4.94						6
Hymenoptera	6	25	15.43				1		11
Lepidoptera	14	64	39.51				1		1
11	59	162	100.00		2	12	2		31

*R·D : Relative Dominance

**Designated Species (NIER, 2006)

Investigation Method

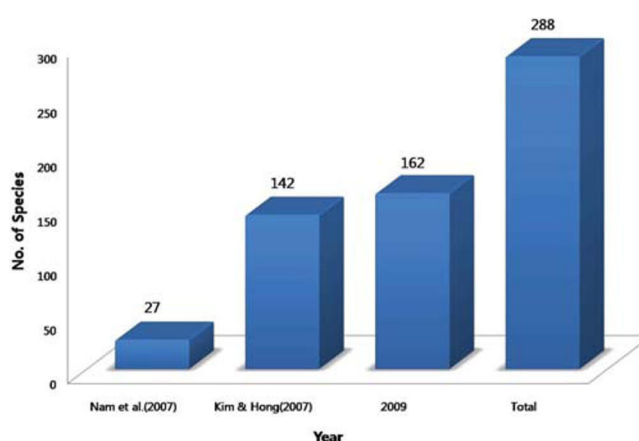
For insect survey of Is. Boleum-do, total 2 times field survey was conducted from April to October, 2009. This research targeted samples caught by installing bait-trap and light-trap, and caught by sifting, sweeping, beating and searching in the areas (Fig. 1). The insect specimens were prepared and classified by families under order, and identified and listed in accordance with the 'Check List of Insects from Korea (1994)'.

session 1: Aug. 24 to 25 of 2009

session 2: Oct. 4 to 5 of 2009

Results

In this study, 162 species of 59 families under 11 orders were identified including 2 endangerd species (level II, *Lethocerus deyrollei* and *Copris tripartitus*), 12 endermic species, 2 management of exotic species and 31 designated species; 64 species of 14 families Lepidoptera (39.51%)

**Fig. 2.** Comparison with previous investigations of the insect in Is. Boleum-do.

which was the highest, 30 species of 14 families Coleoptera (18.52%), 25 species of 6 families Hymenoptera (15.43%) and 11 species of 6 families Orthoptera (6.79%) (Table 1, Appendix 1).

Table 2. The total number of insect and relative dominance in Is. Boleum-do with other survey results

Order	Family	Species	R·D (%)	Endangerd Species		Endemic Species	Management of Exotic Species	IUCN Red List	Designated Species
				Level	Level				
Odonata	1	6	2.08						
Mantodea	1	2	0.69						
Dermaptera	1	1	0.35			1			
Orthoptera	6	21	7.29			21			2
Hemiptera	15	44	15.28		1				2
Homoptera	5	10	3.47						
Neuroptera	2	2	0.69						1
Coleoptera	18	51	17.72		1				13
Hymenoptera	6	37	12.85				1		13
Diptera	4	11	3.82						9
Lepidoptera	18	103	35.76		1		2	1	2
11	77	288	100.00		3	22	3	1	42

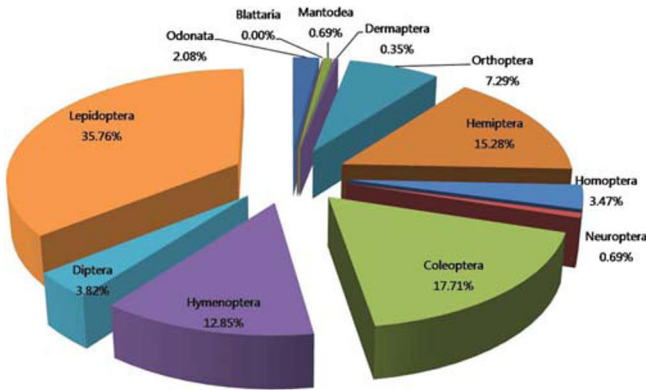


Fig. 3. Taxonomic group composition of the insect in Is. Boleum-do.

Discussion

In this study, 162 species of 59 families under 11 orders were identified. Therefore, the species composition of insect over each result from Is. Boleum-do was a total of 288 species of 77 families under 11 orders including 3 endangered species (level II, *Fabriciana nerippe*, *Lethocerus deyrollei* and *Copris tripartitus*), 22 endemic species, 3 management of exotic species, 1 species of IUCN Red List and 42 designated species; 103 species of 18 families

Lepidoptera (35.76%) which is the highest, 51 species of 18 families Coleoptera (17.72%), 44 species of 15 families Hemiptera (15.28%) and 37 species of 6 families Hymenoptera (12.85%) (Table 2, Fig. 3).

We enumerated the 288 species distributed in the Is. Boleum-do by the present study and previous literatures (Kim and Hong, 2007; Nam *et al.*, 2007). But it will be necessary the further detailed surveys including seasonal surveys and other methods to investigate the insects in this area for the biodiversity conservation as well as to management of islands in Korea.

References

- Kim, K. G. and E. J. Hong (2007) The 3rd National Ecosystem Survey (37605-Boleum), National Institute of Environmental Research (in Korea, CD).
- Nam, S. H., Y. H. Cho, Y. J. Park, Y. J. Kim and U. M. Lim (2007) Marine Ecosystem Approach for the Investigation and Conservation of coastal Island in Incheon, Incheon Metropolitan City (in Korea).
- The Entomological Society of Korea and Korean Society of Applied Entomology (1994) Check List of Insects from Korea, 744 p (in Korea).

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Appendix. Taxonomic list of the insect in Is. Boleum-do

Specific Name	Korean Name	Survey		References*		Remark**
		1 st	2 nd	R1	R2	
Odonata	잠자리목					
Family Libellulidae	잠자리과					
<i>Lyriothemis pachygastra</i> (Selys)	배치레잠자리				●	
<i>Orthetrum albistylum speciosum</i> (Uhler)	밀잠자리				●	
<i>Orthetrum triangulare melania</i> (Selys)	큰밀잠자리		1			
<i>Pantala flavescens</i> (Fabricius)	원장잠자리		1		●	
<i>Sympetrum eroticum eroticum</i> (Selys)	두점박이줄잠자리	6				
<i>Sympetrum infuscatum</i> (Selys)	깃동잠자리	1				
Mantodea	사마귀목					
Family Mantidae	사마귀과					
<i>Statilia maculata</i> (Thunberg)	좀사마귀	3	1			
<i>Tenodera aridifolia</i> (Stoll)	왕사마귀		1		●	
Dermaptera	집게벌레목					
Family Anisolabididae	민집게벌레과					
<i>Anisolabis maritima</i> (Bonelli)	민집게벌레	1				고
Orthoptera	메뚜기목					
Family Tettigoniidae	여치과					
<i>Conocephalus chinensis</i> (Redtenbacher)	썩새기				●	고, 특
<i>Conocephalus gladiatus</i> (Redtenbacher)	긴꼬리썩새기				●	고
<i>Gampsocleis ussuriensis</i> Adelung	긴날개여치				●	고
<i>Holochlora longifissa</i> Matsumura et Shiraki	날베짱이	10				고
<i>Phaneroptera nigroantennata</i> Brunner	검은다리실베짱이	1			●	고
<i>Ruspolia lineosa</i> (Walker)	매부리				●	고
<i>Tettigonia dolichoptera</i> Mori	긴날개중베짱이				●	고
Family Oecanthidae	긴꼬리과					
<i>Oecanthus indicus</i> Saussure	긴꼬리	1			●	고
Family Gryllidae	귀뚜라미과					
<i>Loxoblemmus arietulus</i> Saussure	알락귀뚜라미				●	고
<i>Loxoblemmus doenitzi</i> Stein	모대가리귀뚜라미				●	고
<i>Paratrigonidium bifasciatum</i> Shiraki	풀종다리				●	고
<i>Polionemobius mikado</i> (Shiraki)	좀방울벌레				●	고
<i>Teleogryllus emma</i> (Ohmachi et Matsumura)	왕귀뚜라미	4			●	고
<i>Velarifictorus aspersus</i> (Walker)	귀뚜라미	2				고, 특
<i>Velarifictorus mikado</i> (Saussure)	극동귀뚜라미				●	고
Family Gryllotalpidae	땅강아지과					
<i>Gryllotalpa orientalis</i> (Burmeister)	땅강아지	2				고
Family Pyrgomorphidae	섬서구메뚜기과					
<i>Atractomorpha lata</i> (Motschulsky)	섬서구메뚜기	2			●	고
Family Acrididae	메뚜기과					
<i>Acrida cinerea cinerea</i> (Thunberg)	방아깨비	1	3		●	고, 특
<i>Oedaleus infernalis</i> Saussure	팔중이	5	1		●	고
<i>Shirakiacris shirakii</i> (Bolivar)	등검은메뚜기	1			●	고
<i>Trilophidia annulata</i> Thunberg	두꺼비메뚜기	1	1			고
Hemiptera	노린재목					
Family Nepidae	장구애비과					
<i>Ranatra chinensis</i> Mayr	계아재비		1			
Family Belostomatidae	물장군과					
<i>Lethocerus deyrollei</i> (Vuillefroy)	물장군	2				멸II
Family Gerridae	소금쟁이과					
<i>Gerris (Gerris) latiaabdominis</i> Miyamoto	애소금쟁이			●		
Family Nabidae	췌기노린재과					
<i>Himacerus (Himacerus) apterus</i> (Fabricius)	미니날개큰췌기노린재				●	
Family Miridae	장님노린재과					
<i>Adelphocoris suturalis</i> (Jakovlev)	변색장님노린재				●	
<i>Alloeotomus chinensis</i> Reuter	소나무장님노린재				●	
<i>Charagochilus angusticollis</i> Linnavuori	흰숨털검정장님노린재				●	

<i>Deraeocoris (Camptobrochis) onphoriensis</i> Josifov	온포무늬장님노린재		●	
<i>Eurystylus luteus</i> Hsiao	동쪽탈장님노린재		●	
<i>Lygocoris (Apolygus) pulchellus</i> (Reuter)	새무늬고리장님노린재		●	
<i>Lygocoris (Apolygus) spinolae</i> (Meyer-Dr)	애무늬고리장님노린재		●	
<i>Plagiognathus (Plagiognathus) amurensis</i> Reuter	발해다리장님노린재		●	
<i>Polymerus (Poeciloscytus) cognatus</i> (Fieber)	각시장님노린재		●	
<i>Polymerus (Polymerus) pekinensis</i> Horvth	페킨장님노린재		●	
<i>Stenodema (Brachystira) calcarata</i> (Falln)	홍맥장님노린재		●	
<i>Stenotus rubrovittatus</i> (Matsumura)	홍색얼룩장님노린재		●	
Family Reduviidae	침노린재科			
<i>Oncocephalus assimilis</i> Reuter	비올빈침노린재	●		
<i>Spheganolestes impressicollis</i> (Stal)	다리무늬침노린재		●	특
Family Lygaeidae	긴노린재科			
<i>Geocoris (Piocoris) varius</i> (Uhler)	큰딱부리긴노린재		●	
<i>Neolethaeus dallasi</i> (Scott)	달라스긴노린재		●	
<i>Nysius (Nysius) plebejus</i> Distant	애긴노린재		●	
<i>Pachygrontha antennata</i> (Uhler)	더듬이긴노린재	●	●	
<i>Panaorus csikii</i> (Horvth)	어린원무늬긴노린재		●	
<i>Paromius exiguus</i> (Distant)	흑다리긴노린재	4		
Family Pyrrhocoridae	별노린재科			
<i>Pyrrhocoris sibiricus</i> Kuschakewitsch	땅별노린재	1	●	
<i>Pyrrhocoris sinuaticollis</i> Reuter	별노린재		●	
Family Coreidae	허리노린재科			
<i>Acanthocoris sordidus</i> (Thunberg)	파리허리노린재		●	
<i>Cletus schmidtii</i> Kiritshenko	우리가시허리노린재		●	
<i>Homoeocerus dilatatus</i> Horvth	넓적배허리노린재		●	
<i>Hygia (Colpura) lativentris</i> (Motschulsky)	떼허리노린재		●	
<i>Melypteryx fuliginosa</i> (Uhler)	큰허리노린재		●	
Family Alydidae	호리허리노린재科			
<i>Riptortus clavatus</i> (Thunberg)	툽다리개미허리노린재	2		
Family Rhopalidae	잡초노린재科			
<i>Rhopalus (Aeschyntelus) maculatus</i> (Fieber)	붉은잡초노린재		●	
<i>Rhopalus (Aeschyntelus) sapporensis</i> (Matsumura)	삿포로잡초노린재		●	
<i>Stictopleurus crassicornis</i> (Linn)	흑다리잡초노린재		●	
Family Urostylidae	참나무노린재科			
<i>Urostylis annulicornis</i> Scott	작은주걱참나무노린재		●	
<i>Urostylis lateralis</i> Walker	뒷창참나무노린재		●	
Family Cydnidae	땅노린재科			
<i>Macroscytus japonensis</i> Scott	땅노린재	2		
Family Scutelleridae	광대노린재科			
<i>Eurygaster testudinaria</i> (Geoffroy)	도토리노린재		●	
Family Pentatomidae	노린재科			
<i>Dolycoris baccarum</i> (Linn)	알락수염노린재	1	●	
<i>Eurydema gebleri</i> Kolenati	북쪽비단노린재		●	
<i>Eysarcoris ventralis</i> (Westwood)	배등글노린재		●	
<i>Halyomorpha halys</i> (Stal)	썩덩나무노린재	3	●	특
<i>Plautia stali</i> Scott	갈색날개노린재		●	
Homoptera	매미目			
Family Aphrophoridae	거품벌레科			
<i>Aphrophora maritima</i> (Matsumura)	갈잎거품벌레	1		
Family Membracidae	뿔매미科			
<i>Butragulus flavipes</i> (Uhler)	뿔매미		●	
Family Cicadellidae	매미충科			
<i>Bothrogonia japonica</i> Ishihara	갈집은말매미충		●	
<i>Cicadella viridis</i> (Linn)	말매미충	1		
Family Ricaniidae	큰날개매미충科			
<i>Ricania taeniata</i> Stal	남쪽날개매미충	1		
Family Cicadidae	매미科			
<i>Graptopsaltria nigrofusca</i> (Motschulsky)	유지매미	1		
<i>Meimuna opalifera</i> (Walker)	애매미	2		
<i>Oncotympana fuscata</i>	참매미	1		

<i>Platypleura kaempferi</i> (Fabricius)	털매미			●	
<i>Suishia coreana</i> (Matsumura)	늑털매미	1			
Neuroptera	풀잠자리목				
Family Myrmeleontidae	명주잠자리목				
<i>Hagenomyia micans</i> (MacLachlan)	명주잠자리	1			
Family Ascalaphidae	뿔잠자리목				
<i>Hybris subjacens</i> (Walker)	뿔잠자리	1			특
Coleoptera	딱정벌레목				
Family Cicindelidae	길앞잡이목				
<i>Cicindela (Eugrapha) elisae koreanica</i> Mandl	꼬마길앞잡이			●	
Family Cerambycidae	먼지벌레목				
<i>Brachinus stenoderus</i> Bates	큰목가슴먼지벌레				●
<i>Chlaenius (Pachydinodes) pictus</i> Chaudoir	왕쌍무늬먼지벌레			●	
<i>Dolichus halensis</i> (Schaller)	등빨간먼지벌레	1		●	
<i>Harpalus (Cephalomorphus) capito</i> Morawitz	머리먼지벌레	1	1		
<i>Harpalus (Harpalus) chalcatus</i> Bates	가는청동머리먼지벌레		1		
<i>Harpalus (Pseudoophomus) roninus</i> Bates	설악머리먼지벌레	1			
<i>Macrochlaenites costiger</i> (Chaudoir)	줄먼지벌레	2			
<i>Trigonotoma lewisii</i> Bates	루이스큰먼지벌레	1			
Family Brachinidae	폭탄먼지벌레목				
<i>Pheropsophus javanus</i> (Dejean)	남방폭탄먼지벌레			●	
Family Hydrophilidae	물땡땡이목				
<i>Hydrophilus acuminatus</i> Motschulsky	물땡땡이	4			
<i>Hydrophilus bilineatus cashimirensis</i> Redtenbacher	남방물땡땡이		2		
Family Silphidae	송장벌레목				
<i>Necrodes asiaticus</i> Portevin	큰수중다리송장벌레	1			특
<i>Silpha perforata perforata</i> Gebler	넓적송장벌레	1			특
Family Staphylinidae	반날개목				
<i>Osorius taurus</i> Sharp	투구반날개			●	특
<i>Philonthus (Philonthus) cunctator</i> Sharp	구리딱지좁반날개			●	
<i>Platydracus paganus</i> (Sharp)	홍딱지반날개	1			특
Family Lucanidae	사슴벌레목				
<i>Prosopocoilus inclinatus inclinatus</i> (Motschulsky)	톱사슴벌레				
<i>Serrognathus platymelus castanicolor</i> Motschulsky	넓적사슴벌레	1	1	●	
Family Scarabaeidae	소똥구리목				
<i>Copris tripartitus</i> Waterhouse	애기뿔소똥구리		1		특, 별II
<i>Onthophagus (Strandius) lenzii</i> Harold	랜지소똥땡땡이	1			
Family Melolonthidae	검정땡땡이목				
<i>Heptophylla picea</i> Motschulsky	긴다색땡땡이			●	
<i>Holotrichia morosa</i> Waterhouse	큰검정땡땡이	1	2		
Family Rutelidae	땡땡이목				
<i>Adoretus tenuimaculatus</i> Waterhouse	주둥무늬차색땡땡이	1			특
<i>Mimela holosericea</i> (Fabricius)	금줄땡땡이			●	
<i>Mimela splendens</i> Gyllenhal	땡땡이	2			
<i>Popillia mutans</i> Mewmann	콩땡땡이	3			
Family Cetoniidae	꽃무지목				
<i>Pseudotorynorrhina japonica</i> Hope	풍이	2			
<i>Trichius succinctus</i> (Pallas)	호랑꽃무지			●	
Family Cantharidae	병대벌레목				
<i>Podabrus longissimus</i> Pic	노랑테병대벌레			●	
Family Nitidulidae	밑빠진벌레목				
<i>Soronia fracta</i> Reitter	큰납작밑빠진벌레	1			
Family Coccinellidae	무당벌레목				
<i>Coccinella (Coccinella) septempunctat</i> Linn	칠성무당벌레	1		●	특
<i>Harmonia axyridis</i> (Pallas)	무당벌레	2	1	●	특
<i>Henosepilachna vigintioctopunctata</i> (Fabricius)	이십팔점박이무당벌레			●	
<i>Propylea japonica</i> (Thunberg)	꼬마납생이무당벌레			●	특
Family Tenebrionidae	거저리목				
<i>Encyalesthus violaceipennis</i> (Marseul)	보라거저리	1			
Family Cerambycidae	하늘소목				
<i>Agapanthia pilicornis</i> (Fabricius)	남색초원하늘소			●	특

<i>Corymbia rubra</i> (Linn)	붉은산꽃하늘소			●	특
<i>Megopsis sinica</i> (White)	버들하늘소	1			
Family Chrysomelidae	잎벌레과				
<i>Agelastica coerulea</i> Baly	오리나무잎벌레			●	
<i>Basilepta fulvipes</i> (Motschulsky)	금록색잎벌레	1			특
<i>Colasposoma dauricum</i> Mannerheim	고구마잎벌레	1			
<i>Cryptocephalus koltzei</i> Weise	콜체잎벌레			●	
<i>Dactylispa angulosa</i> (Solsky)	노랑테가시잎벌레			●	
<i>Galerucella nipponensis</i> (Laboissiere)	일본잎벌레		8		
<i>Lema (Lema) concinnipennis</i> Baly	배노랑긴가슴잎벌레			●	
<i>Lema (Lema) diversa</i> Baly	적갈색긴가슴잎벌레	1			특
<i>Ophraella communis</i> LeSage	돼지풀잎벌레	1			
<i>Plagioderia versicolora</i> (Laicharting)	버들꼬마잎벌레			●	
<i>Thlaspidia cribrata</i> (Boheman)	큰남생이잎벌레			●	
Family Curculionidae	바구미과				
<i>Curculio ochrofasciatus</i> Morimoto	노랑띠밤바구미	1			
Hymenoptera	벌목				
Family Formicidae	개미과				
<i>Aphaenogaster famelica</i> (Smith)	황장개미			●	
<i>Camponotus (Camponotus) japonicus</i> Mayr	일본왕개미	5		●	
<i>Crematogaster (Crematogaster) laboriosa</i> Smith	용골등꼬리치레개미			●	
<i>Formica (Serviformica) japonica</i> Motschulsky	곰개미	3	2	●	
<i>Hypoponera gladioli</i> Forel	황침개미			●	
<i>Lasius (Dendrolasius) spathepus</i> Wheeler	민남새개미			●	
<i>Lasius (Lasius) japonicus</i> (Linn)	고동털개미(일본풀개미)			●	
<i>Messor aciculatus</i>	짱구개미	1			
<i>Pachychondyla chinensis</i> (Emery)	왕침개미			●	
<i>Pachychondyla javana</i>	일본침개미	1			
<i>Paratrechina flavipes</i> (Smith)	스미스개미	5	2	●	
<i>Pheidole fervida</i>	극동흑개미	5			
<i>Polyrhachis (Polyrhachis) lamellidens</i> Smith	가시개미	5	3	●	
<i>Pristomyrmex punctatus</i>	그물등개미	5		●	
<i>Tetramorium tsushimae</i>	주름개미	5	5	●	
Family Sphecoidae	구멍벌과				
<i>Isodontia nigellus</i>	먹조롱막벌	3			
<i>Sceliphron inflexum</i> Sickmann	보석나나니			●	
Family Apidae	꿀벌과				
<i>Bombus anachoreta</i> Skorikov	애뒤영벌			●	
<i>Bombus speciosus</i> (Smith)	띠호박벌		3		
<i>Chalicodoma sculpturalis</i>	왕가위벌	2			국, 특
<i>Colletes collaris</i> Dours	어리꿀벌			●	
<i>Nomia punctata</i> Westwood	청띠애꽃벌		1		
<i>Xylocopa appendiculata circumvolans</i>	어리호박벌		1		특
Family Vespidae	말벌과				
<i>Parapolybia varia</i>	뱀허물쌍살벌		1		특
<i>Polistes jadwigae</i> jadwigae	등검정쌍살벌	1	4		특
<i>Polistes japonicus japonicus</i>	꼬마쌍살벌	1	1		특
<i>Polistes snelleni</i>	벌쌍살벌	1			특
<i>Vespa crabro flavofasciata</i> Cameron	말벌	5		●	특
<i>Vespula flaviceps lewisii</i>	땅벌		1		특
<i>Vespa mandarinia</i>	장수말벌	3			특
Family Eumenidae	호리병벌과				
<i>Anterhynchium flavomarginatum</i> Smith	황테감탕벌			●	특
<i>Eumenes pomiformis</i> Fabricius	애호리병벌	1			
<i>Eumenes punctatus</i>	짐호리병벌		1		특
<i>Euodynerus dantici</i> Rossi	별감탕벌			●	특
<i>Orancistrocerus drewseni</i> (Saussure)	줄무늬감탕벌			●	특
Family Scoliidae	매벌과				
<i>Campomeris (Megacampomeris) prismatica</i>	금테줄매벌	2	4		
	줄매벌	2			

Diptera	파리목				
Family Asilidae	파리매과				
<i>Promachus yesonicus</i> Bigot	파리매	2			특
<i>Trichomachimus scutellaris</i> (Coquillett)	검정파리매	1			
Family Bombyliidae	재니등애과				
<i>Systropus suzukii</i> Matsumura	스즈키나나니등애	4			
Family Stratiomyidae	등애등애과				
<i>Ptecticus tenebrifer</i> (Walker)	등애등애			●	특
Family Syrphidae	꽃등애과				
<i>Allograpta balteata</i> (de Geer)	호리꽃등애			●	특
<i>Baccha maculata</i> Walker	알락꽃등애			●	특
<i>Eristalis (Eoseristalis) cerealis</i> Fabricius	배짙은꽃등애		1		특
<i>Eristalis (Eristalis) tenax</i> (Linn)	꽃등애	4	1	●	특
<i>Metasyrphus frequens</i> Matsumura	물결넓적꽃등애		1		특
<i>Phytomia zonata</i> (Fabricius)	왕꽃등애		1		특
<i>Sphaerophoria menthastri</i> (Linn)	꼬마꽃등애	3		●	특
Lepidoptera	나비목				
Family Tortricidae	잎말이나방과				
<i>Clepsis rurinana</i> (Christoph)	반백잎말이나방			●	
<i>Grapholita delineana</i> Walker	네줄애기잎말이나방			●	
Family Scythrididae	애기비단나방과				
<i>Scythris sinensis</i> (Felder et Rogenhofer)	두점애기비단나방			●	
Family Pyralidae	명나방과				
<i>Arippara indicator</i> Walker	굵은띠비단명나방			●	●
<i>Botyodes diniasalis</i> (Walker)	포플라잎말이명나방	1			
<i>Cnaphalocrocis medinalis</i> (Guene)	흑명나방		1	●	
<i>Endotricha olivacealis</i> (Bremer)	검은점뽕죽명나방			●	
<i>Herpetogramma luctuosalis</i> (Guene)	포도들명나방	1			
<i>Lamoria glaucalis</i> Caradja	앞붉은부채명나방			●	
<i>Maruca testulalis</i> Geyer	콩명나방		1		
<i>Orthaga achatina</i> Butler	갈색집명나방	2			
<i>Palpita indica</i> (Saunders)	목화바둑명나방		1		
<i>Pleuroptya ruralis</i> (Scopoli)	콩잎말이명나방			●	
<i>Stemmatophora valida</i> (Butler)	검은날개비단명나방			●	
<i>Sylepta segnalis</i> (Leech)	달무늬들명나방			●	
Family Zygaenidae	알락나방과				
<i>Chalcosia remota</i> (Walker)	뒤흰띠알락나방			●	●
Family Limacodidae	췌기나방과				
<i>Phlossa conjuncta</i> (Walker)	남방췌기나방			●	
Family Thyatiridae	뽕죽날개나방과				
<i>Tethea ampliata</i> (Butler)	넓은뽕죽날개나방	1			
Family Geometridae	자나방과				
<i>Arichanna melanaria</i> (Linn)	뒷노랑점가자나방			●	
<i>Callygris compositata</i> (Guene)	배노랑물결자나방				●
<i>Chiasmia defixaria</i> (Walker)	두줄점가자나방	1			●
<i>Cystidia stratonice</i> (Stoll)	잠자리가자나방				●
<i>Devenilia corearia</i> (Leech)	흑갈색가자나방			●	
<i>Eulithis ledereri</i> (Bremer)	술개빛물결자나방		2		
<i>Geometra dieckmanni</i> Graeser	흰줄푸른자나방	1			
<i>Glaucorhoe unduliferaria</i> (Motschulsky)	흰물결자나방	5			
<i>Hemithea aestivaria</i> (Hbner)	붉은선두리푸른자나방			●	
<i>Heterolocha aristonaria</i> (Walker)	뒷분홍가자나방				●
<i>Hypomecis roboraria</i> (Denis et Schiffemiller)	세줄날개가자나방	1			
<i>Jankowskia fuscaria</i> (Leech)	줄구름무늬가자나방	1			
<i>Ourapteryx persica</i> Mntris	굵은줄제비가자나방		1		국
<i>Rikiosatoa grisea</i> (Butler)	두줄가자나방			●	
Family Lasiocampidae	솔나방과				
<i>Odonestis pruni</i> (Linn)	사과나무나방	1			
Family Sphingidae	박각시과				
<i>Ampelophaga rubiginosa</i> Bremer et Grey	머루박각시	11			
<i>Macroglossum bombylans</i> Boisduval	작은검은꼬리박각시	1			

<i>Macroglossum pyrrhosticta</i> Butler	벌꼬리박각시		1		
<i>Theretra japonica</i> (Boisduval)	줄박각시	1			
Family Notodontidae	제주나방과				
<i>Phalera angustipennis</i> Matsumura	좁은날개제주나방	1		●	
<i>Phalera assimilis</i> (Bremer et Grey)	참나무제주나방			●	
<i>Pterostoma sinicum</i> Moore	주름제주나방	1			
Family Lymantriidae	독나방과				
<i>Arctornis kumatai</i> Inoue	점흰독나방			●	
<i>Arctornis l-nigrum</i> (Miller)	엘무늬독나방			●	
<i>Euproctis subflava</i> (Bremer)	독나방			●	
<i>Lymantria mathura</i> Moore	붉은매미나방	5			
Family Arctiidae	불나방과				
<i>Aglaeomorpha histrio</i> (Walker)	흰무늬왕불나방	1			
<i>Agrisius fuliginosus</i> Moore	점박이불나방	1			
<i>Mitochrista striata</i> (Bremer et Grey)	홍줄불나방				●
<i>Spilosoma punctaria</i> (Stoll)	점무늬불나방	1			
Family Noctuidae	밤나방과				
<i>Acronicta major</i> (Bremer)	왕뿔무늬저녁나방	2			
<i>Adris tyrannus</i> (Guene)	으름밤나방	1			특
<i>Athetis albisignata</i> (Oberthr)	흰점국화밤나방			●	
<i>Axylia putris</i> (Linn)	썩은밤나방	1			
<i>Blasticorhinus hoenei</i> Berio	태백밤나방	2			
<i>Calyptra thalictri</i> (Borkhausen)	갈고리밤나방	1			
<i>Catocala duplicata</i> Butler	꼬마노랑뿔날개나방	1			
<i>Ctenoplusia (Acanthoplusia) agnata</i> (Staudinger)	콩은무늬밤나방	1			
<i>Ctenoplusia albostrata</i> (Bremer et Grey)	긴금무늬밤나방		1		
<i>Edessena hamada</i> (Felder et Rogenhofer)	쌍복판눈수염나방				●
<i>Goneptica opalina</i> (Butler)	붉은띠짚틀나방				●
<i>Hademia incongruens</i> (Butler)	검은띠수염나방	1			
<i>Hadjina chinensis</i> (Wallengren)	중국두점박이밤나방				●
<i>Helicoverpa armigera</i> (Hbner)	왕담배나방	1	1		
<i>Lygephila vulcanica</i> (Butler)	갈색목검은밤나방	1			
<i>Mocis ancilla</i> (Warren)	꼬마구름무늬밤나방				●
<i>Naranga aenescens</i> Moore	벼애나방	2			
<i>Niphonyx segregata</i> (Butler)	영경귀밤나방				●
<i>Pseudaletia separata</i> (Walker)	멸강나방		1		
<i>Zanclognatha griselda</i> (Butler)	줄회색밤나방	1			
Family Hesperidae	팔랑나비과				
<i>Lobocla bifasciata</i> (Bremer et Grey)	왕팔랑나비				●
<i>Ochlodes subhyalina</i> (Bremer et Grey)	유리창떠들썩팔랑나비				●
<i>Parnara guttata</i> (Bremer et Grey)	줄점팔랑나비	1	1		
Family Papilionidae	호랑나비과				
<i>Papilio bianor</i> Cramer	제비나비	2			●
<i>Papilio maackii</i> Mntris	산제비나비				●
<i>Papilio macilentus</i> Janson	긴꼬리제비나비	3			●
<i>Papilio xuthus</i> Linn	호랑나비				●
<i>Parnassius stubbendorfii</i> Mntris	모시나비				●
<i>Sericinus montela</i> Gray	꼬리명주나비	1			
Family Pieridae	흰나비과				
<i>Artogeia canidia</i> (Linn)	대만흰나비	1			●
<i>Artogeia melete</i> (Mntris)	큰줄흰나비	1			●
<i>Artogeia rapae</i> (Linn)	배추흰나비		1		●
<i>Colias erate</i> (Esper)	노랑나비	5	7		●
Family Lycaenidae	부전나비과				
<i>Celastrina argiolus</i> (Linn)	푸른부전나비	5			●
<i>Everes argiades</i> (Pallas)	암먹부전나비		1		●
<i>Lampides boeticus</i> (Linn)	물결부전나비		2		
<i>Lycaena phlaeas</i> (Linn)	작은주홍부전나비				●
<i>Pseudozizeeria maha</i> (Kollar)	남방부전나비	1	1		●
Family Nymphalidae	네발나비과				
<i>Apatura metis</i> Freyer	황오색나비	1			

<i>Araschnia burejana</i> Bremer	거꾸로여덟나비			●	
<i>Argyreus hyperbius</i> (Linn)	암끝검은표범나비		1		
<i>Argyronome laodice</i> (Pallas)	흰줄표범나비			●	
<i>Coenonympha oedippus</i> (Fabricius)	봄치녀나비			●	국, 특, Red
<i>Cynthia cardui</i> (Linn)	작은멋쟁이나비	3	1	●	
<i>Damora sagana</i> (Doubleday)	암검은표범나비	1			
<i>Fabriciana nerippe</i> (C. et R. Felder)	왕은점표범나비			●	별II
<i>Kaniska canace</i> (Linn)	청띠신선나비	1			
<i>Limenitis doerriesi</i> Staudinger	제이줄나비	1		●	
<i>Limenitis homeyeri</i> Tancr	제삼줄나비	2			
<i>Minois dryas</i> (Scopoli)	굴뚝나비	2			
<i>Mycalesis gotama</i> Moore	부치나비	2		●	
<i>Neptis sappho</i> (Pallas)	애기세줄나비	3		●	
<i>Polygonia c-aureum</i> (Linn)	네발나비	5	1	●	
<i>Vanessa indica</i> (Herbst)	큰멋쟁이나비		1		
<i>Ypthima argus</i> Butler	애물결나비	2		●	

*R1: Nam *et al.*(2007), R2: Kim & Hong(2007)

**별: 멸종위기종(Endangered species), 고: 고유종(Endermic species), 특: 특정종(Designated species),
국: 국외반출승인대상종(Management of Exotic species), Red: IUCN Red List